

**Amendments to Specification:**

Please replace the paragraph beginning at page 10, Line 27 with the following paragraph:

Figs. 5(a) and 5(b) shows respective examples of an interface 502, ~~504~~ 552 that allows the user to display in sorted order the images in the working set and in the training set. The images are preferably sorted by such factors as lot number, manual bin, suggested bin, and size.

Please replace the paragraph beginning at page 13, Line 4 with the following paragraph:

Figs. 10(a) and 10(b) are block diagrams of systems in accordance with the present invention distributed over a network; such as the ~~internet~~ Internet or an intranet. In Fig. 10(a), an optical, ebeam, or other types of inspection systems 1002, a classifier 1004/104, and an analysis system 1006 (see Fig. 1) are distributed over the network. In Fig. 10(b), elements of classifier 1056/204, and a feature extractor 1058, are distributed over the network. Natural grouping process 1054 receives as inputs the features of the working set and outputs the natural grouping of the working set. Automatic supervised classifier 1056 receives the features and classes of the training set and the features of defect images, while outputting the classes of the defect images being classified. Feature extractor 1058 receives images and outputs features of the images.